

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOSHITSUGU MORITA,
JUNJI NAKANISHI, KEN TANAKA
and TOSHIO SARUYAMA

Appeal No. 96-0613
Application 08/226,539¹

ON BRIEF

Before GARRIS, JOHN D. SMITH, and WALTZ, Administrative Patent Judges.

WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the
examiner's final rejection of claims 7 through 14 and 18

¹ Application for patent filed April 12, 1994.

Appeal No. 96-0613
Application No. 08/226,539

through 27, which are all of the claims remaining in this application.

According to appellants, the invention is directed to a curable molding composition comprising (A) a curable resin and (B) an epoxy group-containing silicone resin, where component (B) is based on T siloxane units (i.e., $\text{RSiO}_{3/2}$ units), has a controllable molecular weight, and possesses a distinct glass-transition temperature of -90°EC . to 150°EC . (brief, page 2). Claim 7 is illustrative of the subject matter on appeal and is reproduced in an Appendix attached to this decision.

The examiner relies upon the following references as evidence of obviousness:

Griswold et al. (Griswold) 1994	5,279,860	Jan. 18, (filed Jul. 30, 1992)
Shiobara et al. (JPA '942) 1981 (Japanese Kokai Patent Application) ²	56-145942	Nov. 13,
SWS Silicones Corp. (JPA '655) 1986	58-053655	Aug. 20,

²All citations to this reference are from the English translation of record.

Appeal No. 96-0613
Application No. 08/226,539

(Japanese Kokai Patent Application)³

Claims 7 through 14 stand rejected under 35 U.S.C. § 103 as unpatentable over JPA '942 in view of Griswold (answer, page 3). Claims 18 through 27 stand rejected under 35 U.S.C. § 103 as unpatentable over JPA '942 in view of Griswold and JPA '655 (answer, page 5). We reverse both of the examiner's rejections for reasons which follow.

OPINION

The curable resin composition recited in appealed claim 7 consists essentially of (A) a curable resin selected from a group of listed resins and (B) an epoxy group-containing silicone resin of the recited general formula. The composition of appealed claim 7 contains a proviso that 0.1 to 40 mole percent of the total silicon-bonded organic groups in component (B) are epoxy group-containing organic groups and component (B) has a glass-transition temperature of -90 to 150°C.

³The examiner relies on an English abstract of this Japanese Kokai Patent Application (answer, page 3). Appellants rely on an equivalent Canadian Patent No. 1,091,383 (brief, page 7). Any citation to this reference in this decision will be from the Canadian Patent equivalent.

The examiner submits that JPA '942 discloses a composition comprising (A) an epoxy resin, (B) a silicone resin, and (C) an organopolysiloxane block copolymer (answer, page 4). The examiner acknowledges that the "organosiloxanes are not exact," i.e., the organopolysiloxane block copolymer of JPA '942 is not identical to component (B) in appealed claim 7. Accordingly, the examiner applies the Griswold reference for the disclosure of a controlled release agent comprising a silicone resin where "said copolymer [the silicone resin] reads on applicants' claimed epoxy functional siloxane" (answer, page 5). The examiner concludes that "it would have been obvious to one skilled in the art to use the composition as found in the JPA ['942], . . . and to substitute the epoxy functional siloxanes with the siloxanes of Griswold, since they are clearly functional equivalent epoxy-siloxane release agents." (*Id.*).

Appellants argue that there is no basis to combine Griswold with JPA '942, as Griswold is concerned with a five-component pressure-sensitive adhesive while JPA '942 is directed to silicone-epoxy molding compositions for electronic components (brief, page 5). Appellants argue that there is no

basis in JPA '942 for the examiner's conclusion that both references ". . . deal with silicone resins which contain epoxy functional silicone release agents." (brief, pages 5-6).

"When it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the applicant." *In re Gorman*,

933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). Although we agree with the examiner that the epoxy-functional siloxane component (A) of Griswold functions as a release additive to control adhesion (column 2, lines 55-60; column 3, lines 42-51; column 4, lines 49-56), we do not find that JPA '942 discloses "clearly functional equivalent epoxy-siloxane release agents" (answer, page 5). The examiner has not pointed out any disclosure or teaching in JPA '942 that discloses or suggests that the "copolymer epoxy bond-containing organopolysiloxanes" of JPA '942 function as release agents. Comparative Examples 5 and 6 on pages 14-15 of the JPA '942 translation do teach that "it was not possible to remove the molding from the metal mold" when the silicone resin component was omitted (Comparative Example 5) or when

Appeal No. 96-0613
Application No. 08/226,539

the epoxy resin was omitted (Comparative Example 6). However, JPA '942 fails to disclose or teach the function of component (b), the copolymer epoxy bond-containing organopolysiloxane that the examiner urges is "equivalent" to the epoxy-siloxane release agent of Griswold. Accordingly, we find no suggestion or motivation to modify the applied references in the manner proposed by the examiner.

We conclude that the examiner's legal conclusion of obviousness is not supported by the facts and thus cannot stand. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967). Accordingly, the examiner's rejection of claims 7 through 14 under 35 U.S.C. § 103 as unpatentable over JPA '942 in view of Griswold is reversed.

Appealed claims 18 through 27 stand rejected over the same combination of references as discussed above further in view of JPA '655. The examiner applies JPA '655 to show that the process of preparation recited in claim 18 (claim 18 is dependent on claim 7) is "known in the art" (answer, page 5). However, the examiner has not pointed to any disclosure or teachings in JPA '655 that would remedy the deficiencies discussed above with regard to the combination of JPA '942 and

Appeal No. 96-0613
Application No. 08/226,539

Griswold. Additionally, the examiner has not established why one of ordinary skill in the art would have been led or motivated to use the process of JPA '655 in place of the well known hydrosilation addition reaction taught by Griswold (column 6, lines 39-42).

For the foregoing reasons, we find no reason or suggestion to modify the references in the manner proposed by the examiner.

Accordingly, the examiner's rejection of claims 18 through 27 under 35 U.S.C. § 103 as unpatentable over JPA '942 in view of Griswold and JPA '655 is reversed.

Appeal No. 96-0613
Application No. 08/226,539

The decision of the examiner is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
JOHN D. SMITH)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
)	
THOMAS A. WALTZ)	
Administrative Patent Judge)	

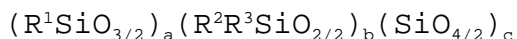
TAW:svt

APPENDIX

7. A curable resin composition consisting essentially of:

(A) 100 weight parts of a curable resin selected from the group consisting of phenolic resins, formaldehyde resins, xylene resins, xylene-formaldehyde resins, ketone-formaldehyde resins, furan resins, urea resins, imide resins, melamine resins, alkyd resins, unsaturated polyester resins, aniline resins, sulfonamide resins, epoxy resins, and copolymer resins from among the preceding; and

(B) 0.1 to 500 weight parts of an epoxy group-containing silicone resin that has the general formula



wherein R^1 , R^2 and R^3 each represents a group selected from the group consisting of an epoxy group-containing organic group and a monovalent hydrocarbon group with the proviso that said epoxy

group-containing organic groups comprise 0.1 to 40 mole percent of the total silicon-bonded organic groups in said silicone resin (B), a is a positive number, b is zero or a positive number, c is zero or a positive number, b/a has a value of zero to 10, $c/(a + b + c)$ has a value of zero to 0.3 and said silicone resin (B) has a glass-transition temperature of -90EC to 150EC.

Appeal No. 96-0613
Application No. 08/226,539

DOW CORNING CORPORATION
Patent Department
Mail CO1232
Midland, MI 48686-0994